BRUHAT BANGALORE MAHANAGARA PALIKE

Yelahanka Zone, Electrical Division

Detailed Estime for Shifting of Electrical Utilities, of road widening from NH-7 to SWD bridge along Jakkur road near Raitara Santhe Ward No-01 in Yelahanka

Budget Head:.....

Ward No. Estimate:..... Rs. 7,50,000.00

Sl no	Part A: Description	Unit	qty	Rate	Amount
	Part: A : New Proposed Portion				
1	11 Mtrs long Spun pole	No	2	15800	31600
2	9mtrs ling RCC pole	No	2	5941	11882
3	Horizontal X Arms set with H.T.S.T Support Bolts Nuts, Washers & Pole clamp	Set	5	449	2245
4	4 pin X Arm	Nos	5	318	1590
5	11 KV Pin Insulators	No	12	103	1236
6	45 KN Disc Insulator	No	6	300	1800
7	1.1 KV Pin Insulator	No	15	41	615
8	No 8 KN Strain Insulator	No	10	14	140
9	Guy set Complete	Set	2	855	1710
10	Earthing materials pipe type for grounding	No	4	1355	5420
12	Coyote conductor including 1.5% of sag	Mtr	90	93.86	8447
13	Rabbit conductor including 1.5% of sag	Mtr	90	36.81	3313
				Total	**69998**
	Part: B : Labour Charge				
1	11 Mtrs long Spun pole	No	2	2084	4168
2	9mtrs ling RCC pole	No	2	937	1874
3	Horizontal X Arms set with H.T.S.T Support Bolts Nuts, Washers & Pole clamp	Set	5	88	440
4	4 pin X Arm	Nos	5	85	425
9	Guy set Complete	Set	2	314	628
10	Earthing materials pipe type for grounding	No	4	507	2028
12	Coyote conductor including 1.5% of sag	Mtr	90	4.031	363
13	Rabbit conductor including 1.5% of sag	Mtr	90	2.308	208
					10134
	Relesing and Refixing				
1	Releasing & Refixing of Spun pole structure	Nos	2	3418	6836
2	Releasing & Refixing of 11 KV 200 A GOS	Nos	1	1069.7	1070
3	Releasing & Refixing of 11 Horizontal X Arms	Set	2	167.2	334
4	Releasing & Re- Errection of 100 KVA Transformer Center	Nos	1	1530	1530
5	Releasing and Re-wiring of LT Lead wire	Set	1	1224	1224
6	LT Metering box with CTs and neccesary wiring for housing ETV Meter (Please see CDS-42)	Nos	1	866	866
7	LT Electronic Tri-Vector Meter 5A, Class-0.5/1.0 accuracy	Nos		1060	1060
	Total				**12920**
	Relesing				
1	8 Mtr PCC Pole	Nos	2	1619.1	3238
2	Releasing and Re-Refixing of 11 KV Horizontal X Arms	Set	2	167.2	334
	Total				**3572**

ABSTRACT	
Particulars	
Material Cost	69998
Labour Charges	26627
Locality Allowence @ 30% On Labour charges	7988
Contigencies @ 2% On Total Material & Labour	1932
Employees cost @ 20% on total labour cost (2+3)	6923
Total cost of Estimate in Rs	**113468**

18	Digging of pits 1.8mtr depth for erection of 9 to 10 mtr long steel/RCC/PSC supports as per approved Drawing. Hard Soil	Per Pit	2	1145	2290
19	Providing cement concrette to poles and guy sets with material and lobour including necessary curing etc.., complete(cost does not include excavation). A) Base Concreating with cc 1:4:8 b) Pole based for 9 mtrs square pole (650X650X150mm)	Each	2	252	504

20	Providing cement concrette to poles and guy sets with material and lobour including necessary curing etc.., complete(cost does not include excavation). B) Pole concreting with cc 1:2:4 (without Coping) a) 9mtrs Support (650X500X1700)	Each	2	2185	4370
21	Erection of RCC/PSC poles 9 to 10mtr long but in a pit of 1.8mtr	No	2	603	1206
22	Releasing of Pole of 9 Mtrs Long	No	2	542.7	1085.4
23	Fixing and wiring as SV/MV light fittings with suitable clamps brackets lamps bolts and nuts using departmental material and departmental ladder vehicle under supervision of departemental staff	Set	2	535	1070
24	Releasing of SV/MV light fitting by Using departmental ladder vehicle under supervision of departemental staff	Set	2	481.5	963
	PWD Electrical SR				
25	Supplying of LT UG cable having aluminium conductor PVC insulated, sheathed, galvanized, steel wire/steel tap armoured cable with PVC outer sheathing 1.1KV Class I. Class 'A' PVC Cable 3.5 core 35sqmm	Per Mtr	140	155.23	21732.2
26	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required. I. In existing trench /duct. b) 25 sqmm to 75 sqmm	Rmtr	140	7.942	1111.88
27	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc.. complete. (As per Civil SR KSRB 1-2, P-7)b. In hard Soil	Rmtr	50	36.1	1805
28	Supplying, fixing wiring earth electrode for gounding conduits, I.C.Cutouts and other equipments on the meter board using 40mm dia 2.90 thick GI 2.5 mtr long buried in a pit... the pit should be filled with equal proportion of salt and charcoal 150mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 12 mm dia.	Each	4	1407.9	5631.6
29	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc c. 35 Sqmm	Each	4	206.49	825.96
30	Supplying and Fixing 4 Nos of 590 mm length High Yield Tensile Cold Rolled Pitched threads (680 N/sq mm) 27 mm Bolt dia (Mkt Rate)	Nos	22	974.7	21443.4
31	Hire Charges Components for Crane Charges , crane 80 tonnes Sl no 86, code no 1311, Page No XXXX, KPWD SR CIVIL 2012-13	hr	10	625.25	6252.5
32	Material Components for Trailor 30 tonne capacity ,Sl no821, Page No XXIX, KPWD SR CIVIL 2012-13	hr	20	722	14440
33	Releasing and Re-Fixing halogen/metal halide/SVL/IL floodlight fitting over existing pole/wall ceiling including clamps ,bolts ,nuts and wiring using suitable capacity wires complete i.e Rs=130.00 for fixing & 0.9 of Rs=130.0	Each	17	178.33	3031.61
34	Supplying and drawing PVC flexible unarmoured copper control cable of approved make.E) 8c x 2.5Sqmm.1 Group A	per mtr	50	54.15	2707.5
35	Casting of suitable foundation for the 16/20 mtr High mast including designing and cost of all materials like Anchor plates,Template and washers labour charges, all other incidental charges etc,. complete as per specification and Drawing given in KPWD elect SR 2010-11(P.No 107) Detailed Calculation as per CIVIL SR items Enclosed.	Each	2	19431.91	38863.816
36	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc. complete. D) Rating: 100-125 Amps make : Group A	Each	6	5378.9	32273.4
37	Fabricating supplying and mounting MS box made out... SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer pain and finally finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. a) 14 SWG	sqcm	45000	0.26714	12021.3

	upplying and fixing angle iron frame work fabricated out of M.S angle iron… and M.S. flat… with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. A).40x40x6mm.	Per Mtr	14	173.28	2425.92
39	Supplying and fixing of Miniature circuit breakers/on existing MCB distribution boards using necessary fixing materials and C Type Curve, indicator ON/OFF, energy cross 3 with short circuit breaking capacity of 10K and Complete wiring as required. Class A. make : (L&T, Siemens, MG, Legrand, ABB f).40-63Amps TPN 1) Group 'A'	Each	4	1079.39	4317.56
40	Material Components for Anchor Plates (IS 2062) Sl no 423, code no 0712, Page No XIV, KPWD SR CIVIL 2012-13	Each	4	169.67	678.68
41	Material Component Steel wire Rope 40 mm Sl no 258, code no 0958, Page No IX, KPWD SR CIVIL 2012-13	kgs	40	37.544	1501.76
42	Supplying High pressure sodium vapour street light luminaire 250wsuitable for use with high pressure sodium vapour lamp with integrated control gear and grey colr powder coated. The fitting shall be non corrosive pressure die cast aluminium housing with high purity anodized aluminium housing with EPDM Gaskets suitable for Outer Dia of pole 40 mm -60 mm. Cable entry through a cable gland with toggle clips. IP65 protection for both optical & electrical compartment. Bottom cover may be with poly carbonate/tempered/ toughened glass.Luminaire efficiency should be > 60 % and ambient temperature >35 deg C. High Intensity Discharge electro magnetic ballast with copper winding of Orthocyclic winding coil. Class H insulated dual coated copper wire. Complaince to IEC 61347-2-9 Safety & IEC 60923-Performance. Winding Temperature rise "Tw-130deg C & temperature sise T=70 deg C. Luminaire shall be suitable to operate on 230/250 V 50 Hz AC supply finish including wiring . Ignitor, condenser, SS Toggles for opening front hingeable glass 250 Wattsa) Group 'A'	Each	40	6900	276000
43	Supplying & fixing of 32 mm dia class A GI pipe bracket up to 2 mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 or rail or RCC pole/wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires complete. Using 32mm dia G.I pipe	Each	40	893	35720
44	Supplying and fixing of timer Operating Illuminance Levels I. For Switching ON : < 60 lux for >30 sec II. For Switching OFF : >10 lux for >30 sec Switching Endurance : Minimum 5,000 cycles. • Max. Device Power Insulation Resistance : Minimum 5 Meg Ohms • Operating Temperature Range : -10o C to +55oC (Ambient) • Operating Humidity Range : Upto 95% RH at 40oC Auto Voltage trip levels, Auto High Voltage Sense and Trip : Above 280 VAC, Auto High Voltage Sense and Reset : Below 265 VAC. Auto low voltage sense and trip : Below 150 VAC, Auto low voltage sense and reset : Above 165 VAC, Consumption : 1 Watt at 230 VAC(Approved Rates) Contactor details: supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and As per IS-13947	Each	5	15730	78650
	Part C				**572923.00**
	Part A and Part B				**113468.00**
	BESCOM Charges				**63609.00**
	GRAND TOTAL				**750000.00**

CERTIFICATE :-

1. The place was inspected and the work is essential.
2. The provision made in the estimate are adequate and necessary and the work comes in the bbmp limit and is legitimate Charges on the BBMP funds.
3. The estimate is based on KPWD (Ele) S.R.2010-11, BESCOM SR Rates and 2014-15 SR Rates.
4. Part A, Part B, Ii Schedule and ABSTRACT of this Estimate considerd has per the Estimate submitted for Shifting of LT & HT line by BESCOM authorities.

Executive Engineer (Ele)
Yelahanka Zone, BBMP

TECHNICALLY SANCTIONED FOR Rs. 7,50,000/-
Rupees ...Seven Lakh Fifty Thousand only...
Under ...P.2786 widening and Strengthening of Road at Kempegowda Ward...
Registered as EE( ) No. ...
Subject to conditions contained in enclosed note EE( ) No. JC/Y2/PP/AS/846/13-14
Dt. 23.01.2013
Estimate AJ Sanctioned
EE/Ele/Y2/TS/03/15-16 No.
Dated 05.01.2016 Rs. 7,50,000/-
Executive Engineer